103D CONGRESS 1ST SESSION

H. R. 1675

To provide for enhanced cooperation between the Federal Government and the United States civil aviation manufacturing industry in aeronautical technology research, development, design, and commercialization, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

APRIL 2, 1993

Mr. Gejdenson (for himself and Mr. Gephardt) introduced the following bill; which was referred jointly to the Committees on Science and Technology and Public Works and Transportation

A BILL

- To provide for enhanced cooperation between the Federal Government and the United States civil aviation manufacturing industry in aeronautical technology research, development, design, and commercialization, and for other purposes.
 - 1 Be it enacted by the Senate and House of Representa-
 - 2 tives of the United States of America in Congress assembled,
 - 3 SECTION 1. SHORT TITLE.
 - 4 This Act may be cited as the "Aeronautical Tech-
 - 5 nology Consortium Act of 1993".
 - 6 SEC. 2. FINDINGS AND PURPOSES.
 - 7 (a) FINDINGS.—The Congress finds the following:

- (1) A strong civil aviation manufacturing industry is critical to the health of the United States economy; aircraft production in the United States affects nearly 80 percent of the economy, and for every additional dollar of shipments of aircraft, output of the economy increases by an estimated \$2.30.
 - (2) A strong civil aviation manufacturing industry is critical to the national security of the United States because of the synergies between civil and military aeronautical technologies and the need for a strong advanced technology industrial base.
 - (3) The National Critical Technologies Panel (established pursuant to section 601 of the National Science and Technology Policy, Organization, and Priorities Act of 1976 (42 U.S.C. 6681)) has identified aeronautics as one of 22 categories of technologies critical to national economic prosperity and to national security.
 - (4) While the United States has traditionally dominated the world commercial aircraft market, the United States civil aviation manufacturing industry is facing the two critical challenges of significant cutbacks in defense procurement and related military spending, and the growing competitive strength

- of foreign subsidized aviation industries, such as the European aircraft consortium, Airbus Industrie.
 - (5) Airbus Industrie, a consortium of 4 European aircraft manufacturing companies that are supported by their governments, has developed a family of competitive aircraft models and has captured 1/4 of the world market for large civil aircraft.
 - (6) In 1992, the United States signed an agreement with the European Community that permits the European governments to continue to subsidize up to 33 percent of the development costs of new large civil aircraft.
 - (7) Given current and expected reductions in defense spending and increased competitive pressures in the civil aircraft market, it is critical for the Federal Government to coordinate its aeronautics and related programs and redirect these resources to assist the United States civil aviation manufacturing industry to meet the competitive challenge from foreign suppliers such as Airbus Industrie.
 - (8) The Federal Government has played an active role in research and development of aeronautical technologies since the National Advisory Committee on Aeronautics was created in 1915.

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- (9) In recent years, however, Federal Government support for aerospace research and development has focused overwhelmingly on military and space technologies.
 - (10) Federal programs relating to aeronautics research and development today are spread among a number of differing Federal agencies, including the Department of Defense, the Department of Transportation, and the Department of Commerce, as well as the National Aeronautics and Space Administration and the National Science Foundation.
 - (11) Federal financial assistance to the semiconductor industry consortium known as Sematech has been successful in improving the competitiveness of the United States semiconductor industry.
 - The Federal Government should use (12)Sematech as a model in developing a program to provide financial assistance to an industry-led consortium of United States civil aviation manufacturing companies.
 - (13) Such a government-industry consortium should focus its efforts on research, development, design, and commercialization of new aeronautical technologies and related manufacturing technologies,

- cal technologies developed for national security purposes to commercial applications for large civil air-
- 3 craft.
- 4 (b) Purpose.—The purpose of this Act is to
- 5 strengthen and assist the United States civil aviation man-
- 6 ufacturing industry.

7 SEC. 3. DEFINITIONS.

- 8 For purposes of this Act:
- 9 (1) The term "Advisory Committee" means the
- 10 Aeronautical Technical Advisory Committee estab-
- lished in section 6.
- 12 (2) The term "Consortium" means the Aero-
- nautical Technology Consortium referred to in sec-
- 14 tion 5.
- 15 (3) The term "Coordinating Committee" means
- the Aeronautical Technology Coordinating Commit-
- tee referred to in section 4(c).
- 18 (4) The term "Director" means the Director of
- the Office of Science and Technology Policy.
- 20 (5) The term "Federal laboratory" has the
- meaning given such term in section 4(6) of the Ste-
- venson-Wydler Technology Innovation Act of 1980
- 23 (15 U.S.C. 3703(6)).
- 24 (6) The term "joint venture" has the meaning
- given such term in section 28(j)(1) of the National

- Institute of Standards and Technology Act (15 U.S.C. 278n(j)(1)).
 - (7) The term "large civil aircraft" means all aircraft that are designed for passenger or cargo transportation and have 100 or more passenger seats or its equivalent in cargo configuration.
 - (8) The term "manufacturing technology" means techniques and processes designed to improve manufacturing quality, productivity, and practices, including engineering design, quality assurance, concurrent engineering, continuous process production technology, energy efficiency, waste minimization, design for recyclability or parts reuse, shop floor management, inventory management, worker training, and communications with customers and suppliers, as well as manufacturing equipment and software.
 - (9) The term "Program" means the Aeronautical Technology Program established pursuant to section 4(a).
 - (10) The term "Strategy" means the National Aeronautics Strategy developed pursuant to section 4(b)(1).
- 24 (11) The term "United States-owned company" 25 means a company or other business entity the ma-

- jority ownership or control of which is by United
- 2 States citizens.

3 SEC. 4. AERONAUTICAL TECHNOLOGY PROGRAM.

- 4 (a) ESTABLISHMENT.—The President shall establish 5 an Aeronautical Technology Program which shall—
 - (1) provide for interagency coordination of Federal research and development programs relating to aeronautical technologies and related manufacturing technologies;
 - (2) provide a mechanism for private industry comment and guidance regarding the cost-effectiveness and commercial practicability of existing and proposed Federal research and development programs relating to aeronautical technologies and related manufacturing technologies;
 - (3) promote, to the maximum extent practicable, the transfer and conversion to commercial applications of aeronautical technologies developed for national security purposes;
 - (4) coordinate and expand existing Federal research and development programs relating to subsonic and supersonic aeronautics, with particular focus on government-industry cooperative programs to develop large civil aircraft beyond the financial means of any single company;

- facturing industry in developing an Aeronautical
 Technology Consortium for the purpose of providing
 Federal assistance to industry-led joint ventures established for research, development, design, and
 commercialization of aeronautical technologies and
 related manufacturing technologies applicable to
 large civil aircraft; and
 - (6) establish other goals and priorities for Federal research and development programs relating to aeronautical technologies and related manufacturing technologies.

(b) National Aeronautics Strategy.—

- (1) IN GENERAL.—The President, acting through the Coordinating Committee, shall develop a National Aeronautics Strategy to implement the Program. The Strategy shall contain specific recommendations for a 5-year national effort, to be submitted to the Congress within 6 months after the date of enactment of this Act.
- 21 (2) CONTENTS OF STRATEGY.—The Strategy 22 shall—
- 23 (A) establish the specific goals and prior-24 ities for the Program for the fiscal year in

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1	which the Strategy is submitted and the suc-
2	ceeding 4 fiscal years;
3	(B) set forth the role of each Federal
4	agency and department in implementing the
5	Program;
6	(C) describe the levels of Federal funding
7	for each agency and specific research, develop-
8	ment, and commercialization activities required
9	to achieve such goals and priorities;
10	(D) take into account the recommenda-
11	tions of the Advisory Committee established in
12	section 6; and
13	(E) consider and use, as appropriate, re-
14	ports and studies conducted by Federal agen-
15	cies and departments, the National Research
16	Council, or other entities.
17	(3) Federal agencies and departments to
18	BE ADDRESSED.—The Secretary shall address,
19	where appropriate, the relevant programs and activi-
20	ties of—
21	(A) the Department of Defense, particu-
22	larly the Department of the Air Force, the De-
23	partment of the Navy, and the Defense Ad-
24	vanced Research Projects Agency;

1	(B) the Departments of Commerce, par-
2	ticularly the National Institute of Standards
3	and Technology;
4	(C) the Department of Transportation,
5	particularly the Federal Aviation Administra-
6	tion;
7	(D) the National Aeronautics and Space
8	Administration;
9	(E) the National Science Foundation;
10	(F) the Federal laboratories; and
11	(G) such other agencies and departments
12	as the President or the Coordinating Committee
13	considers appropriate.
14	(c) Coordinating Committee.—
15	(1) AUTHORITY; COMPOSITION.—The Program
16	shall be administered by an Aeronautical Technology
17	Coordinating Committee composed of the following
18	officials:
19	(A) The Director, who shall be chair-
20	person.
21	(B) The Secretary of Defense.
22	(C) The Secretary of Commerce.
23	(D) The Secretary of Transportation.
24	(E) The Administrator of the National
25	Aeronautics and Space Administration.

1	(F) The Director of the National Science
2	Foundation.
3	(2) Functions.—The Coordinating Committee
4	shall—
5	(A) serve as the lead entity responsible for
6	implementation of the Program;
7	(B) coordinate all Federal research and de-
8	velopment programs relating to aeronautical
9	technologies and related manufacturing tech-
10	nologies;
11	(C) consult regularly with and seek rec-
12	ommendations from the Advisory Committee es-
13	tablished by section 6;
14	(D) consult with academic, State, industry,
15	and other appropriate groups conducting re-
16	search on and using aeronautical technologies;
17	and
18	(E) submit to the Congress an annual re-
19	port, along with the President's annual budget
20	request, describing the implementation of the
21	Program.
22	SEC. 5. AERONAUTICAL TECHNOLOGY CONSORTIUM.
23	(a) IN GENERAL.—Under the Program, the Coordi-
24	nating Committee shall provide assistance to an Aero-

1	nautical Technology Consortium, which shall consist of all
2	eligible firms that—
3	(1) are engaged in research, development, test-
4	ing, design, demonstration, or production of aero-
5	nautical technology applicable to the production of
6	large civil aircraft;
7	(2) are selected by the Coordinating Committee,
8	through the Director, on the basis of the criteria
9	specified under subsection (e); and
10	(3) are necessary to enable the Consortium to
11	achieve its purpose as described under subsection
12	(c).
13	(b) Eligible Firms.—For purposes of this section,
14	the term "eligible firm" means a company or other busi-
15	ness entity (including a consortium of such companies or
16	other business entities, as determined by the Secretary of
17	Commerce) that, as determined by such Secretary—
18	(1) conducts a significant level of its research,
19	development, engineering, design, and manufactur-
20	ing activities in the United States; and
21	(2) either—
22	(A) is a United States-owned company; or
23	(B) is a company incorporated in the
24	United States and has a parent company which

1	is incorporated in a country the government of
2	which—
3	(i) affords United States-owned com-
4	panies opportunities, comparable to those
5	afforded any other company, to participate
6	in research and development consortia to
7	which the government of that country pro-
8	vides funding directly or provides finding
9	indirectly through international organiza-
10	tions or agreements; and
11	(ii) affords adequate and effective pro-
12	tection for the intellectual property rights
13	of United States-owned companies.
14	(c) Purpose.—The purpose of the Consortium is to
15	conduct industry-led joint ventures, including studies, re-
16	lating to—
17	(1) manufacturing technologies applicable to
18	the production of large civil aircraft;
19	(2) the aeronautical infrastructure, including
20	next-generation wind tunnels and associated tech-
21	nology, and test beds for aeronautical systems and
22	subsystems;
23	(3) the transfer and conversion of aeronautical
24	technologies developed for national security purposes
25	to commercial applications for large civil aircraft;

1	(4) subsonic aeronautical technologies applica-
2	ble to the development and production of large civi
3	aircraft;
4	(5) supersonic aeronautical technologies appli-
5	cable to the development and production of large
6	civil aircraft; and
7	(6) environmental technologies necessary for
8	aeronautical competitiveness, including technologies
9	that limit or reduce noise and air pollution.
10	(d) Assistance To Be Provided.—In providing as-
11	sistance to the Consortium, the Coordinating Committee
12	acting through the Director, shall—
13	(1) provide financial and other assistance to the
14	United States civil aviation manufacturing industry
15	in the formation of the Consortium;
16	(2) support the Consortium, and such subordi-
17	nate joint ventures as the Consortium may establish
18	by making available equipment, facilities, and per-
19	sonnel;
20	(3) aid the Consortium, and such subordinate
21	joint ventures as the Consortium may establish, by
22	means of grants, cooperative agreements, contracts
23	and provision of organizational and technical advice
24	(4) enter into contracts and cooperative agree-

ments in support of the Consortium with independ-

- ent research organizations, institutions of higher education, and agencies of State and local governments;
- (5) involve the Federal laboratories in the Consortium, where appropriate, using among other authorities the cooperative research and development agreements provided for under section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a); and
 - (6) carry out, in a manner consistent with this section, such other cooperative research activities with the Consortium and joint ventures as may be authorized by law or assigned to the Coordinating Committee by the President.
- 15 (e) SELECTION OF CONSORTIUM PARTICIPANTS.—
 16 The criteria for selection of industry participants in the
 17 Consortium, as referred to in subsection (a)(2), are as
 18 follows:
 - (1) The extent of present participation of the eligible firm in Federal research and development programs relating to aeronautical technologies and related manufacturing technologies.
 - (2) The extent of present manufacturing activity of the eligible firm relating to the development and production of large civil aircraft, engines, ad-

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1	vanced materials, avionics, and other related compo-
2	nents.
3	(3) The extent of present manufacturing activ-
4	ity of the eligible firm relating to aeronautical tech-
5	nologies developed for national security purposes
6	that may have commercial applications for large civil
7	aircraft.
8	(4) The technical excellence of the eligible firm
9	(5) The extent of financial commitment of the
10	eligible firm to the Consortium.
11	(6) Such other criteria that the Director pre-
12	scribes.
13	(f) CHARTER; OPERATING PLAN.—The Consortium
14	shall have—
15	(1) a charter, agreed to by all industry partici-
16	pants in the Consortium, that meets requirements
17	established by the Coordinating Committee; and
18	(2) an annual operating plan that is developed
19	in consultation with the Coordinating Committee
20	and the Advisory Committee established in section 6.
21	(g) Financial Commitment of Industry Partici-
22	PANTS.—
23	(1) IN GENERAL.—The Director shall ensure
24	that, to the maximum extent the Director deter-

mines to be practicable, the total amount of the

- funds provided by the Federal Government to the Consortium does not exceed the total amount provided by the industry participants in the Consor-
 - (2) AUTHORITY TO EXCEED 50 PERCENT FEDERAL FUNDING.—Nothing in this subsection shall be construed to prohibit the Federal Government from providing greater than 50 percent of the funds for any individual joint venture, project, or program where the Director determines such funding to be consistent with the goals of the Program.
 - (3) Consideration of in-kind contributions to provide for consideration of in-kind contributions by industry participants in the Consortium and joint ventures for the purpose of determining the share of the funds that have been or are being provided by such participants.
- (h) MERIT REVIEW.—No contract or other award for a research project may be made under this section until the research project in question has been subject to a merit review, and, in the opinion of the reviewers appointed by the Director, has been shown to have scientific and technical merit.

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1	(i) Oversight of Consortium Activities.—The
2	Coordinating Committee, acting through the Director,
3	shall take such actions as are necessary and appropriate
4	to ensure that the Consortium's activities help to achieve
5	the purposes of this Act, including—
6	(1) prescribing regulations for the purposes of
7	this section;
8	(2) establishing procedures for the use by the
9	Coordinating Committee of funds authorized to a
10	particular Federal agency or department that is par-
11	ticipating in the Consortium;
12	(3) establishing procedures regarding financial
13	reporting and auditing to ensure that contracts and
14	other awards are used for the purposes specified in
15	this section and are in accordance with sound ac-
16	counting practices;
17	(4) monitoring how technologies developed
18	through the Consortium are used, and reporting to
19	the Congress on the extent of any overseas transfer
20	of those technologies;
21	(5) assuring that the recommendations of the
22	Advisory Committee established in section 6 are con-
23	sidered routinely in carrying out the responsibilities
24	of the Coordinating Committee under this Act; and

1	(6) providing for the expeditious and timely
2	transfer of technology developed and owned by the
3	Consortium to the participants in the Consortium.
4	(j) Export of Aeronautical Technology.—Any
5	export of materials, equipment, and technology developed
6	by the Consortium in whole or in part with financial as-
7	sistance provided under this section shall be subject to the
8	Export Administration Act of 1979 (50 U.S.C. App. 2401
9	et seq.) and shall not be subject to the Arms Export
10	Control Act.
11	(k) Freedom of Information Act.—Section 552
12	of title 5, United States Code, shall not apply to the fol-
13	lowing information obtained by the Federal Government
14	on a confidential basis in connection with the activities of
15	any industry participant in the Consortium:
16	(1) Information on the business operation of
17	any industry participant in the Consortium.
18	(2) Intellectual property, trade secrets, and
19	technical data possessed or developed by any indus-
20	try participant in the Consortium.
21	(l) Intellectual Property.—
22	(1) DISCLOSURE LIMITATIONS.—Notwithstand-
23	ing any other provision of law, intellectual property,
24	trade secrets, and technical data owned and devel-
25	oped by the Consortium or any industry participant

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in the Consortium may not be disclosed by any officer or employee of the Federal Government except in accordance with a written agreement between the owner or developer and the Director.

(2) TITLE TO AND LICENSING OF INVENTIONS AND PATENTS.—Title to any invention or patent arising from assistance provided under this section shall vest in a company or companies incorporated in the United States. The Federal Government may reserve a nonexclusive, nontransferable, irrevocable paid-up license, to have practiced for or on behalf of the Federal Government, in connection with any such invention or patent, but shall not, in the exercise of such license publicly disclose proprietary information related to the license. Title to any such invention or patent shall not be transferred or passed, except to any company incorporated in the United States, until the expiration of the first patent obtained in connection with such invention. For purposes of this paragraph, the term "invention or patent" means an invention patentable under title 35, United States Code, or any patent on such an invention.

(3) LICENSING TO COMPANIES.—Nothing in this subsection shall be construed to prohibit the li-

1	censing, to any company, of intellectual property
2	rights arising from assistance provided under this
3	section.
4	(m) Application of National Cooperative Re-
5	SEARCH ACT.—The National Cooperative Research Act of
6	1984 (P.L. 98-462; 15 U.S.C. 4301 note) shall apply to
7	the Consortium in the conduct of the activities of the
8	Consortium under this Act.
9	SEC. 6. AERONAUTICAL TECHNOLOGY ADVISORY COMMIT
10	TEE.
11	(a) ESTABLISHMENT.—There is established an Aero-
12	nautical Technology Advisory Committee (hereafter in this
13	Act referred to as the "Advisory Committee").
14	(b) Functions.—The Advisory Committee shall ad-
15	vise the Coordinating Committee and the Consortium
16	on—
17	(1) the strategy and other appropriate goals
18	and priorities for the Program, and how best to
19	achieve those goals;
20	(2) the operating plan of the Consortium;
21	(3) the annual progress of the Program and the
22	Consortium in meeting the requirements of section
23	4(a) and, in the first 5 years, the strategy;
24	(4) organizational and programmatic reforms
25	which would improve the effectiveness of Federal re-

- search and development programs relating to aeronautical technologies and related manufacturing technologies in promoting the competitiveness of the United States civil aviation manufacturing industry;
 - (5) mechanisms for private industry comment and guidance regarding the cost-effectiveness and commercial practicability of existing and proposed Federal research and development programs relating to aeronautical technologies and related manufacturing technologies;
 - (6) policies and mechanisms to promote the transfer and conversion to commercial applications of aeronautical technologies developed for national security purposes; and
 - (7) other goals and priorities for Federal research and development programs relating to aeronautical technologies and related manufacturing technologies.
- (c) Membership.—The Advisory Committee shall be composed of 12 members, who shall be appointed by the President from among individuals who, because of their experience and accomplishments in the field of aeronautics and related technological and scientific fields, are exceptionally qualified to analyze and recommend policy relating to aeronautical technology research and development.

Membership of the Advisory Committee shall be composed of representatives of— (1) large civil aircraft manufacturing compa-3 nies: (2) aircraft engine manufacturing companies; 6 (3) advanced materials companies; 7 (4) avionics and other systems and subsystems 8 companies; 9 (5) other subcontractor firms engaged in aeronautical technology research, design, development, 10 11 and production; and 12 (6) Federal laboratories, universities, and inde-13 pendent research institutes. 14 (d) TERMS OF MEMBERSHIP.—Each member of the Advisory Committee shall be appointed for a term of 3 years, except that of members first appointed, 4 shall be appointed for a term of 1 year, 4 shall be appointed for 17 a term of 2 years, and 4 shall be appointed for a term of 3 years, as designated by the President at the time of the appointment. A member of the Advisory Committee may serve after the expiration of the member's term until 21 a successor has taken office. (e) Chairperson.—The President shall appoint 1 23

member of the Advisory Committee to serve as chair-

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person.

- 1 (f) QUORUM.—7 members of the Advisory Committee 2 shall constitute a quorum.
- 3 (g) MEETINGS.—The Advisory Committee shall meet
- 4 at least quarterly at the call of the chairperson or one-
- 5 third of its members, and at the call of the Coordinating
- 6 Committee.
- 7 (h) Compensation and Expenses.—
- 8 (1) No compensation for members.—Each 9 member of the Advisory Committee shall serve with-
- out compensation.
- 11 (2) Travel expenses authorized.—While
- away from their homes or regular places of business
- in performance of the duties of the Advisory Com-
- mittee, members of the Advisory Committee shall be
- 15 allowed travel expenses in accordance with sub-
- chapter I of chapter 57 of title 5, United States
- 17 Code.
- 18 (i) Federal Advisory Committee Act.—Section
- 19 14 of the Federal Advisory Committee Act (5 U.S.C.
- 20 App.) shall not apply to the Advisory Committee.
- 21 SEC. 7. AUTHORIZATION OF APPROPRIATIONS.
- There are authorized to be appropriated to the Office
- 23 of Science and Technology Policy, to carry out the provi-
- 24 sions of this Act, such sums as may be necessary for the
- 25 fiscal years 1994 and 1995.

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